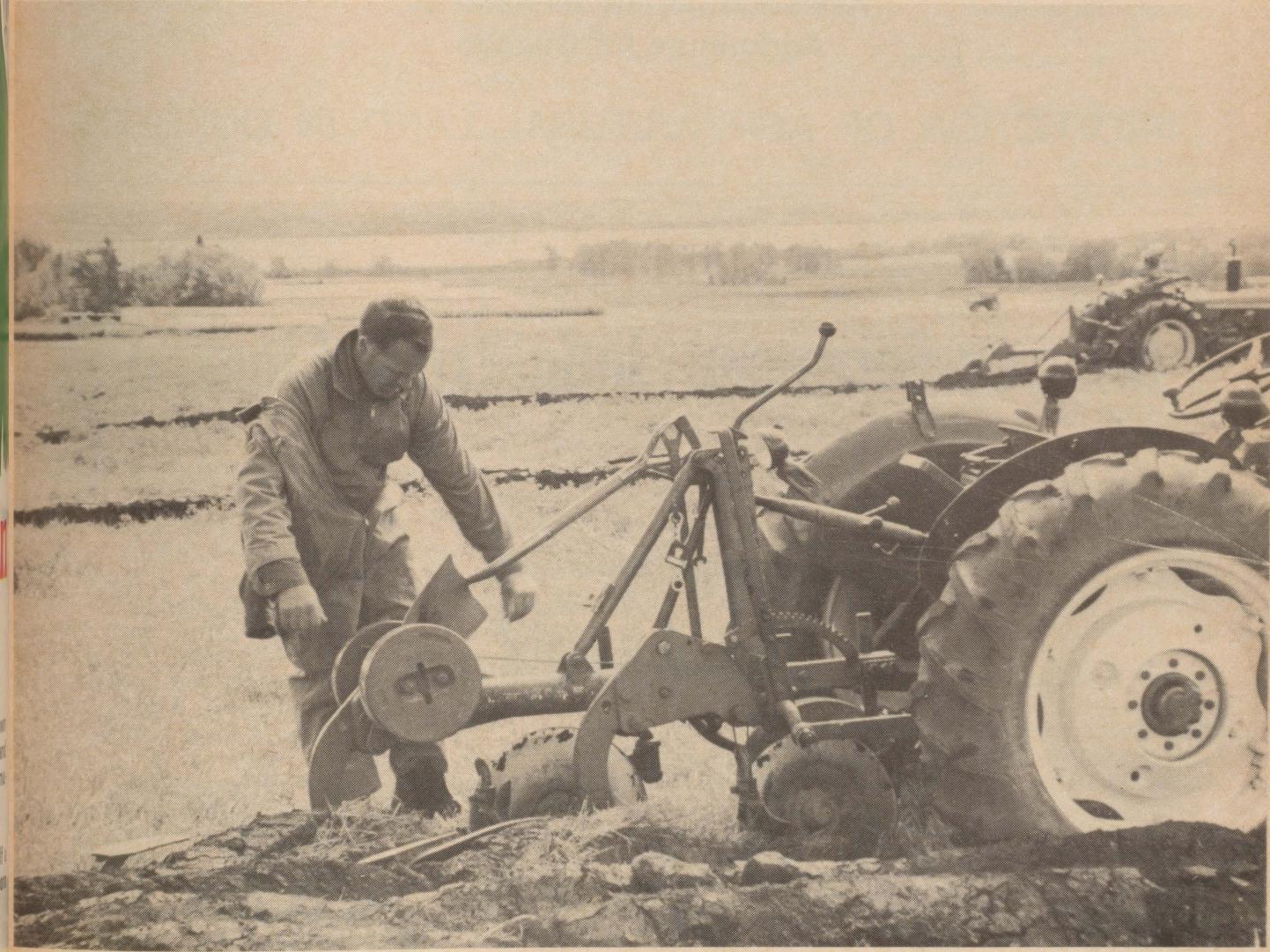


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THE macdonald JOURNAL

OCTOBER 1978

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QUEBEC FARMERS' ASSOCIATION ANNUAL MEETING

Wednesday, November 1, 1978

at the

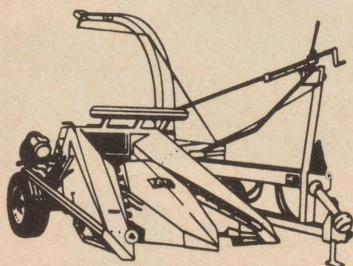
**Centennial Centre
Macdonald College
10:00 a.m. — 4:00 p.m.**

Guest Speaker:

**François Dagenais
Assistant Deputy Minister of
Agriculture for Quebec**

"PROTECTION OF AGRICULTURAL LAND IN QUEBEC"

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OCTOBER 1978

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Journal Jottings

If you want to know more about the sex life of an earthworm, you won't be any the wiser by reading "Earthworms: The Agriculturist's Friend" in this issue. (I only raise the subject because the earthworm is a hermaphrodite.) However, there is a wealth of other information in this article about one of the lowly creatures that — though many of us take for granted — is so beneficial to one of the fundamentals of living, the soil. When I asked Professor Hill if he would like to contribute an article to the Journal, he replied, "What about one on earthworms?" Instead of asking "why?", I said "why not" and I'm glad I did. As well as up-to-date data, there is a quote on worms from Aristotle. Coming up through the centuries to William Cowper (1731-1800), there is also the following:

*"I would not enter on my list of friends
(Tho' grac'd with polish'd manners and fine sense,
Yet wanting sensibility) the man
Who needlessly sets foot upon a worm."*

After reading the article I thought this fitting.

From the farmer's friends we turn to the farmer's enemies, blackbirds. Through articles and Macdonald Reports over the past couple of years we have attempted to keep abreast of research activities being carried out at Macdonald on

blackbirds. Satisfactory solutions have not as yet been found; there are many questions still being asked and no doubt new ones will arise. However, the update in this issue points, I believe, to ultimately finding at least some satisfactory answers.

I don't know about blackbirds being affected, but I would imagine quite a few earthworms were in evidence at the recent Provincial Plowing Match held at Deschambault. To quote from a little cartoon that accompanied the article on earthworms, the worms may have "divided" opinions about this annual turning of the sod, but those present seemed to be of one mind that it was a success. There's a photo-story of this recent event in this issue.

Editorial

The Quebec Farmers' Association is holding its annual meeting on November 1 at Macdonald College. This occasion gives members a chance to report on their local activities and exchange ideas as well as make collective decisions about new priorities, projects, and programs.

It goes without saying that the QFA has increased its profile among the English-speaking farmers in the rural areas of Quebec. Its gain in popularity and relevance is largely due to the activities generated by the fieldmen, who have given a new perspective to the organization and a better service at the local level. Another phenomenon that has contributed to the growth of the Association is the socio-political atmosphere in the province of Quebec. Many of the English-speaking farmers have identified themselves with the QFA to seek out solutions to improve the information services, education, and social activities in their communities and in provincial events as well.

With the increase in participation by its members, the QFA is in a stronger position to inform government and other farm organizations such as the Union des Producteurs Agricole (UPA) of their situation and problems. This year, the Board of Directors will take special care to listen to the problems encountered by the local groups in their programs.

One of the areas of complaint is the lack of information on the legislation concerning the protection of agricultural territory in Quebec. To clarify any misconceptions, the Board of Directors has invited Mr. François Dagenais, Assistant Deputy Minister, to explain the contents of the legislation and its implications at the annual meeting. The question period scheduled at the end of his presentation will give farmers an opportunity to have any points clarified.

The QFA activities are not limited to the annual meeting. Equally important is the election of delegates by the local QFA groups. These people will form the new Board of Directors for the coming year. The representation of local ideas and leadership is essential toward the growth and betterment of the Association.

The annual meeting, however, gives an ideal opportunity to all members to meet and voice their opinions and ideas on the direction that the organization is taking. It is an ideal chance not only to meet old friends but also to become informed on exactly what the government has formulated on protecting land use in Quebec. This is a concern that could affect the livelihood of many farmers and will no doubt have a long-term impact on farming trends in Quebec.

This is an invitation to all those interested in agriculture and land use to assist at the annual meeting at Macdonald College on November 1, 1978.

Martin van Lierop,
Editor.

. . . Blackbird Studies at Macdonald College

by Profs. Roger Bider and
Roger Titman
Department of Renewable
Resources

The farmers are right. Blackbirds have become more numerous in Quebec over the last decade or so. Our questionnaire survey conducted during the summer of 1977 showed that farmers had noticed a marked increase in blackbird numbers and that the birds had begun to cause serious damage to their crops in the early 1960s. Meanwhile Dr. Richard Dolbeer and his associates at the U.S. Fish and Wildlife Service in Sandusky, Ohio, were analyzing data from North American breeding bird surveys which indicated that although there was not an overall increase in the continental population of red-winged blackbirds, over the last 10 years there has been a 17 per cent increase of these birds in the region including upstate New York, eastern Ontario, and southwestern Quebec.

Coincident with the increase in red-winged blackbirds serious damage to corn was reported in selected local areas. After being made aware of this problem and being prodded by the farm community, in 1975 we began preliminary studies investigating the interaction between blackbirds and corn. We studied the biology of these birds, looked at concentrations of them in southwestern Quebec and the pattern of damage to crops, and tried a variety of control techniques. Our results were similar to what others had found elsewhere, and the methods of control which we tried offered little promise for solution of the problem.



Blackbird workers stitch together netting to be used for large enclosures to examine corn damage under a range of bird densities.



Several blackbird workers get experience in the construction of enclosures. The one above, used for duck studies, is similar to that subsequently built over a section of cornfield for blackbird research.

In September 1977, the corn growers of region 8 led by Colin McNamara and Viateur Pagé of Masson invited representatives of the U.P.A. des Laurentides, Dr. Doug Miller of Agriculture Canada and Roger Bider of Macdonald College to present reports of work completed and to discuss what needed to be done to solve the blackbird problem. There appeared to be two major alternatives in attempting to control the blackbirds. One would be

to move the blackbirds into less preferred but suitable non-agricultural habitat. Scaring them from one farm to the next with any of a variety of frightening agents was not deemed acceptable. The feasibility of this project was considered doubtful and possible costs astronomical so the corn growers favoured the second alternative. This would be to reduce blackbird numbers where they concentrated at nocturnal roost sites.

Several workers including Marilyn Martin in her studies at Macdonald College have shown that the damage to corn is highest near roost sites and that it decreases with distance away from a roost. Therefore it seemed obvious that we should focus upon the possibility of controlling blackbirds at these locations. Since roosts often contain other species of birds which do not damage crops, selective control had to be considered. However, at the Valleyfield-Beauharnois roost

Marilyn Martin found that male red-winged blackbirds arrived north separate from the females and were exclusive users of the roost site during March and part of April.

It was thus proposed that we should consider experimental control at a major spring roost. At this point, a series of new questions arose: Can the surfactants which were used to control blackbirds in Kentucky and Tennessee be effectively used in Quebec in March or early April? Is the spraying of these chemicals at night near freezing temperatures from a helicopter logically possible or even permissible under federal regulations? Will killing a given proportion of the spring population affect the fall population which damages local corn? How much does it cost to achieve this control, and what is the gain in corn produced? Do the spring roosts contain only birds which cause local damage or are the sites used by individuals which eventually go elsewhere? What are the relative differences in damage caused by different densities of birds using a corn field?

The authors together with Bob Clark, Pat Weatherhead, and Robin Stewart of Macdonald College then designed studies intended to answer these questions and more. Thanks largely to pressure from the corn growers and the U.P.A. des Laurentides, funds were granted by both the federal and provincial governments to support our search for answers to these problems.

Since this spring 17 people have been employed to work on this project. Graduate research programs for three Masters' students, Barry Bendell, Hamilton Greenwood, and Steve Tinker, form an integral part of our effort. In 1978 we found positive answers to the first two questions above and we have interesting leads which should shed important light on the other pro-



Above: Mike Gillingham records corn damage in the enclosure for Steve Tinker (hidden by corn), the graduate student conducting this study. Below: Pat Weatherhead and Bob Clark look on as Jack Domaradzki prepares wires to detonate explosives for a cannon net used to capture blackbirds near the Valleyfield-Beauharnois roost.



blems we began to investigate. These studies will continue at least through 1979.

We are not working alone. Normand Potvin in Sherbrooke and researchers from Guelph, Ontario, and several locations in the United States are also deeply involved with this pro-

blem. We keep in close contact with them.

The problem has not yet been solved, but we hope that with continued help and cooperation from the farm community we can continue to do relevant research which will make strong progress toward a solution.

THE AGRICULTURIST'S FRIENDS

by Jennifer A. Ramsay
and Stuart B. Hill*

While nature works slowly in the production of topsoil, often over centuries, man, through poor agricultural practices, may deplete this valuable resource within an individual's lifetime. In the absence of a rich population of soil animals, 500 to 1000 years may be required to create an inch of topsoil. However, under favourable conditions, earthworms, lowly creatures to many people, can speed up this process to only five years. As agriculture, and ultimately civilization, depend on the maintenance of a fertile topsoil (Hyams, 1952; Mitchell, 1946), it is in our best interest to encourage earthworms in their soil building activities.

Long before the invention of agricultural implements, earthworms ploughed the soil, mixing, tilling and building topsoil as they burrowed through the earth. Their importance has been clearly recognized for nearly 200 years, and even in the Fourth Century B.C., Aristotle, it is said, aptly referred to earthworms as "the intestines of the earth" though he may well have been referring to their appearance rather than to their function. But what do we know about these animals? The following will help us to understand earthworms and how we may be able to benefit from their activities.

Where Are Earthworms Found?

Relatively few people realize that the "common" earthworms, of which

the best known species, but not always the commonest, is called *Lumbricus terrestris* by biologists, are just as much newcomers to North America as we are. During the last glaciation period even native earthworms were unable to survive in those areas covered with ice and have only been reintroduced (often accidentally) to these soils by man, the familiar ones since European settlement. In fact, there are many areas in Canada where earthworms are absent and where the productivity of the soils could be substantially increased if they were introduced.

Earthworms are most numerous in grassland and mull soils, relatively rare in acidic (or mor) soils, and intermediate and variable in numbers in arable lands. However, other factors such as soil texture, moisture, temperature, and food supply also determine whether a field may have more earthworms than one on a neighbouring farm. Earthworm populations vary not only from one soil to another, but also throughout the year, being most numerous in the spring and early summer.

There are many species of earthworms and each generally has different preferences for soil conditions. Of the 200 species found in North America only 18 have been found in Canada; only six of these are native to this country. Some species are only found within the top surface layers while others, such as *Lumbricus* may be able to penetrate several feet to the subsoil horizon. Those that live within the surface layers generally migrate to lower depths during the summer as the soil becomes drier. Cultivation of the soil may enable earthworms to penetrate further into the soil.

How Do Earthworms Influence Soil Fertility?

The accidental introduction of earthworms to North America may have been the best outcome of contact between the early settlers and native peoples. While the Indians suffered from lack of exposure and immunity to European diseases, the fertility of many North American soils was greatly enhanced through the recycling of organic matter by earthworms.

The activity of earthworms is most easily appreciated by comparison with the situation in regions where they are absent: the decomposition of organic matter there is slow, such that layers of litter accumulate on the soil surface and fail to be incorporated into the soil. More specifically, the activity of earthworms is important to the agriculturist in four respects, in that they:

- * improve soil structure
- * mix and till the soil
- * aid in humus formation
- * increase the availability of plant nutrients

The burrowing of earthworms improves the physical structure of the soil, creating channels through which plant roots may more easily penetrate the soil. In addition to increasing soil porosity and aeration, this activity also improves soil drainage and water penetration while eliminating hardpan conditions. Earthworms may also enhance soil structure through the formation of aggregates. Secretions in earthworm intestines cement soil particles together into aggregates which aid in erosion control. Man,

* Jennifer A. Ramsay is a research assistant and Dr. Stuart B. Hill is an Assistant Professor in the Department of Entomology at Macdonald College.

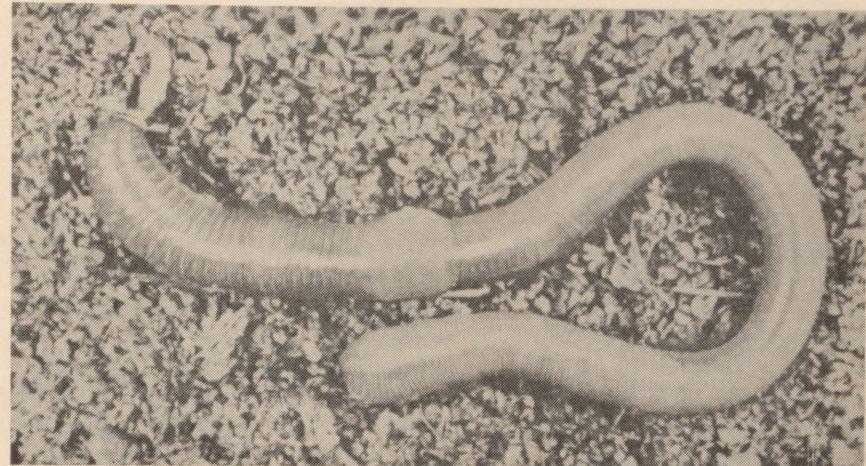
through agricultural practices, such as cultivation, may temporarily improve soil structure, but the earthworm has longer-term effects in maintaining soil tilth.

As earthworms burrow through the earth, they consume large quantities of soil and fresh or partially decomposed organic matter from the soil surface, depositing it as fecal matter, or casts, in the lower soil horizons. Similarly, soil from the subsoil horizon is moved by these animals to the upper levels where it is mixed with the surface soil, resulting in a more uniform distribution of plant nutrients. Charles Darwin (1881), the naturalist famous for his ideas on evolution, estimated that 10.6 tons of materials are brought to the soil surface of each acre by earthworms (or approximately 5t/hectare).

Through the ingestion of organic matter earthworms are important to the initial breakdown as well as to subsequent decomposition of organic matter. In fact, earthworms may consume more surface organic matter than all other soil animals together. This material is eventually excreted as casts, concentrating nutrients and rendering them more water-soluble and available to plants. Researchers have found that worm casts are generally richer in exchangeable calcium, potassium, and phosphorus than the surrounding soil, while earthworms themselves and their excretions are valuable sources of nitrogen. By bringing soil nutrients to the upper horizons from the lower subsoil, the earthworms counteract the effects of leaching whereby many nutrients are washed from the root zone and consequently rendered unavailable to plants.

How Do Agricultural Activities Affect Earthworms?

As earthworms are a measure of soil fertility, so are they indicators of



soil management practices. Consequently, the use of earthworms to our benefit depends not only upon a knowledge of their activities but also upon an awareness of how our own activities, in particular agricultural practices, may influence their distribution.

Earthworm population may be increased or decreased by the following agricultural practices:

- * cultivation
- * cropping
- * fertilizers
- * pesticides

As previously mentioned, earthworms are generally more numerous in grasslands than in arable land. Evidence indicates, however, that earthworm populations do not decline from mechanical damage during tillage operations, but rather from a reduction in the organic matter content of the soil. Repeated row cropping will reduce the number of earthworms, while the inclusion of grass or field crops in a rotation and intercropping will counter this effect.

Limestone generally increases earthworm populations and, in poor soils, nitrogen fertilizers may also benefit these indirectly. Most other mineral fertilizers have little effect on earthworm numbers, while organic matter such as manure, crop residues, or mulches favour earthworm multiplication by providing them with a source of food.

Many (though not all) of the insecticides, herbicides, and fungicides that are used to control agricultural pests are toxic to earthworms and may conflict with the natural biological control of pests. For example, earthworms play an important role in the control of apple scab, caused by the fungus *Venturia inaequalis*, which overwinters on fallen leaves and twigs. Apple scab may be culturally controlled by burning these disease-carrying materials in the fall, or it may be chemically prevented through the use of copper sulphate, which is also toxic to earthworms. A less expensive, but equally effective means of controlling apple scab, however, is the introduction of earthworms, preferably *Lumbricus terrestris*, into orchard soils. These animals take the fallen leaves and twigs into their burrows where the vegetation eventually

decomposes and ceases to be a source of disease. (One researcher found that earthworms may remove up to 90 per cent of leaf-fall in orchards (Raw 1962).)

Other pesticides that are lethal to earthworms include arsenic and copper compounds, chloropicrin, metham sodium, methyl bromide, D-D, chlordan, heptachlor, phorate and carbamate insecticides (Edwards and Loftus, 1972). Although other compounds may be less toxic to earthworms, these chemicals are concentrated in their bodies and may be lethal to birds and mammals when they are eaten.

How May Earthworms Be Used To Increase Soil Fertility?

Earthworms have been successfully introduced into areas where they are absent and have been found to increase the yield of crops. The long-term benefits of encouraging earthworms can be translated into dollars. Researchers have estimated that for every dollar invested in earthworms on New Zealand sheep farms, the farmer can expect a return of \$3.34 and an increase in carrying capacity of 2.5 stock units/hectare or an increase in productivity of 25-30 per cent (Crump 1969).

When considering the use of earthworms to improve soil fertility it is important to remember that these animals thrive only under certain conditions. Most are unable to survive in sandy, dry, acid soils and all need organic matter for food. In addition, not all earthworm species are suitable for land reclamation. Species that are the easiest to cultivate, i.e., those grown on compost or manure piles, are usually not suitable for inoculation of arable lands.

What Are Other Uses Of Earthworms?

Earthworms are familiar to the fisherman and poultry producer as bait or animal feed, but few North Americans realize that earthworms are regarded as a source of dietary protein, even a delicacy, by other cultures. However, popularized by events such as the Great Canadian Worm Recipe Contest, these animals may eventually worm their way into North American kitchens in the form of Mrs. Wiebe's Wiggly Cake (Waldon 1978). Earthworms have also been used for medicinal purposes since ancient times in the treatment of illnesses such as bladder stones, jaundice, rheumatism, fever and impotency. Their efficiency, however, requires proper scientific investigation!

Vermiculture, the art of breeding and raising earthworms, is a billion dollar enterprise, supplying eager fishermen, zoos, fish hatcheries, poultry producers, and biology classrooms. The production of earthworms requires large amounts of organic matter with which to feed them. Consequently, vermiculture could be easily integrated with industries such as canneries, breweries, slaughterhouses, and papermills where large quantities of organic waste are produced. Rabbit breeders have found that earthworms placed under hutches are very effective in controlling odours from animal droppings and provide extra income if the earthworms are sold. Similarly, many of our urban wastes could be recycled through earthworms, solving many of our current problems in respect of solid waste disposal and water pollution.

Conclusions

Whether we are backyard gardeners or fully fledged farmers, it must be remembered that earthworms are not the antidote to infertile soils and poor management. If soils are to be

improved through the use of earthworms, we must provide them with sufficient food and moisture. Only then may we profit from their activities as ploughmen and builders of the soil.

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Macdonald Reports

by Jim Feeny

CANFARM CUT

On August 16, Robert Andras, of the Federal Treasury Board, announced cuts of one and a half billion dollars in the federal government's budget over the next two years. Just about every federal department will have its budget cut somewhat, and Agriculture Canada is no exception. It will lose \$87 million. Mr. Andras said that some \$6 million of that will be saved by the total elimination of Canfarm.

Most Canadian farmers are familiar with Canfarm. Some 25,000 of them used it last year. Canfarm started as a farm accounting system, but in the last couple of years it had branched out, developing a number of programs which were to be used as farm management tools. Some of these computerized programs helped the farmer figure out economical but nutritionally sound dairy rations. Others helped him decide when to replace machinery (based on the costs involved, not on the fact that he couldn't get the darn thing started!), or whether he would be better off by renting instead of buying. Still another dealt with cashflow: how to set up payments so that they would come due at those times of the season when farm income was the highest.

All of these services will be lost in another few months. Marcel Couture is associated with the Diploma Program here at Macdonald College, teaching courses in farm management and production economics to both Diploma and Degree in Agriculture students. He worked for Canfarm before coming to Mac and has maintained contact with his old colleagues by acting as Mac's representative on the Canfarm Advisory Committee. This committee was made up of representatives of universities and provincial departments of agriculture from across the country.

Marcel Couture says that the elimination of the Canfarm system is a real mistake on the part of the federal government. Canfarm had just finished a major revision of its programs for farm accounting, in which the more complicated parts had been cut out. These were replaced by simpler procedures which were easier for the farmer to work with, and which were more closely tied to his real needs. The 25,000 farmers who used Canfarm last year were just becoming familiar with the new accounting version, and with the management tools I mentioned earlier. Now that the federal government has decided to cut Canfarm, these farmers will be left holding an empty bag — one that the government had given them and asked them to help fill in the first place.

It won't only be farmers who will miss Canfarm, Mr. Couture says. Many universities and colleges, Macdonald among them, had begun to use Canfarm as a major part of their farm management courses. Students were asked to make decisions much like those made by farmers every day: Should I apply more fertilizer? Should I be feeding more supplement? Should I buy more land? The students' answers to these questions were fed to the Canfarm computer in Guelph. The computer compared the students' answers to those made by farmers in real life, and told the students how much money they stood to gain or lose based on their decisions.

Provincial departments of agriculture were working along the same lines, but in real-life situations. The computer tie-ins were made so that they could be taken right into the farmers' homes and plugged into their telephones. A farmer who was thinking of adding 10 cows to his milking line could give this information to the computer, along with other relevant data: cost of renovations to the stable, cost of extra quota, and so on. In seconds, the

computer could tell him how the extra costs involved would compare to the new income to be brought in with the additional cows. The computer couldn't make decisions for the farmer, but it could give him a lot of help in making up his mind.

Both the universities and the provincial agriculture departments have been left in the lurch by the federal decision to abandon Canfarm. The universities are left with large gaps in their teaching programs; the agriculture people who have been gearing up to increase the use of Canfarm in their respective provinces are left with staff who must be diverted to other duties or let go. Marcel Couture says that there is some hope that the Quebec Department of Agriculture may take over some of Canfarm's computer programs to offer to farmers in this province. However, nothing definite has been decided as this is being written, except that Canfarm, as a federal service, will be eliminated.

STAFF CHANGES

Every year at this time we prepare a summary of Staff comings and goings for the new academic year. There is a lot to report this year: a good number of new faces around the College, some people who have been away for awhile, and a few who are leaving for various lengths of time. To those new people: welcome to the Clan! We at the Journal are certain that you'll quickly pick up the team spirit that makes Mac such a good place to be. We also wish all those who are leaving us good luck in their new endeavours, for however long you'll be away.

Mr. PETER APPLETON has resigned from the Department of Agricultural Economics. He is working as an agricultural consultant on the national and international levels.

Dr. PETER ARNTFIELD has left the Department of Entomology for other employment.

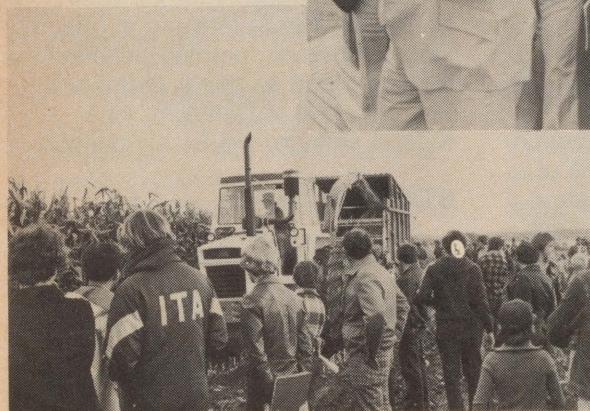
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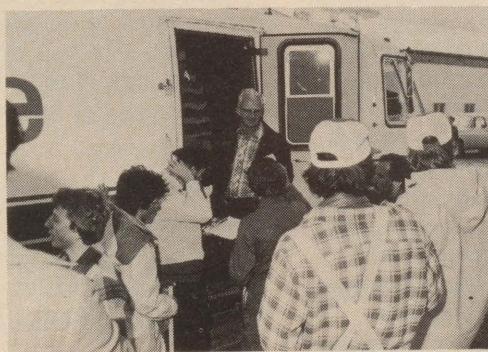
Mme Céline Martin, Home Economist from the Ministry of Agriculture of Quebec, was one of the guest speakers at the consumer program. She is giving a food demonstration featuring Quebec agricultural products.



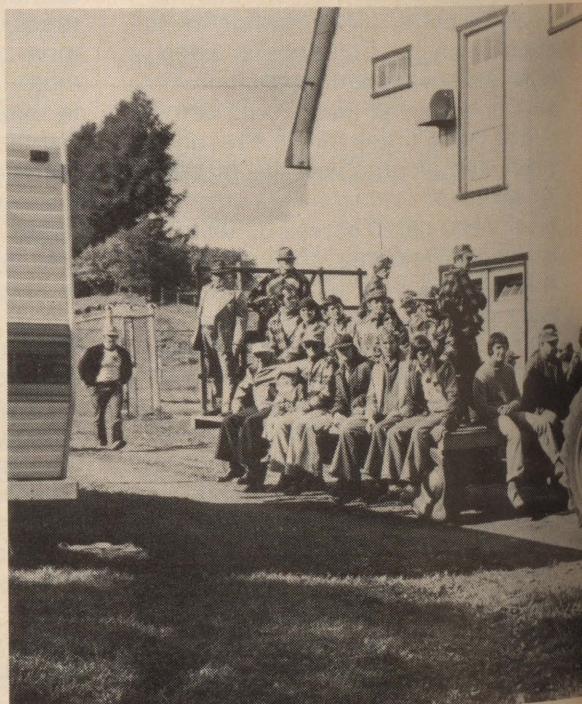
Mr. Gaston Roy, representing the Institut de Technologie Agricole de St-Hyacinthe, is seen receiving the Intercollegiate Championship Trophy from Mr. Jean Genest, Director of the Deschambault Agricultural Research Station.



Above right: The Minister of Agriculture of Quebec, the Honourable Jean Garon, visits the information booth of Agriculture Quebec. With the Minister are Mr. Maurice Tremblay, chef de cabinet, and Mr. M. Florent Morasse, secrétaire particulier adjoint. Above: Farmers and students from agricultural schools across Quebec followed the farm machinery demonstrations with great interest.



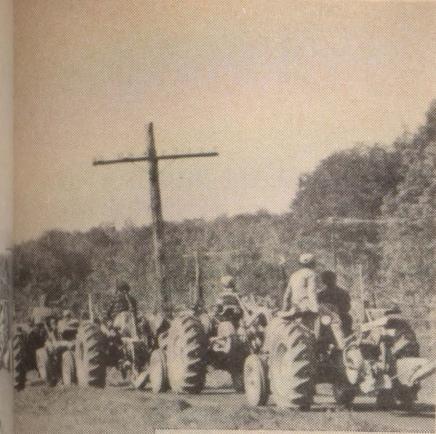
Mr. Al Hammond from Lachute is supervising the participants in the Intercollegiate class draw their respective parcel number.



The Deschambault Station offered its visitors guided tours during the event. There were many things to see and visit; thus farmers had the opportunity to see new developments in agriculture and also to observe new

The 24th Quebec Provincial Plow and Farm Machinery Demonstration Quebec Agricultural Research Deschambault

Photos by Magella Chouinard
Photographer, Ministry of Agriculture



Jean-Charles Marcil seen in action and closely observed by farmers and students interested in learning some of the secrets of good plowing.



Above left: The big parade of competitors going to the competition field. A record number of entries saw representatives from all over Quebec coming to the 24th annual Provincial Plowmen's competition held at Deschambault. Above: The Quebec Provincial Champion for 1978 Mr. Jean-Charles Marcil receiving the Esso trophy from Mr. Robert Chalut, the official representing the company. Martin van Lierop, Secretary-Manager, in centre, helps with the trophy.



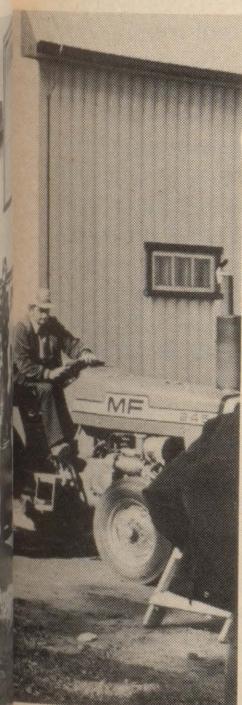
Farmers could observe first hand the work of some new farm equipment that machinery companies are marketing in Quebec.



Some of the competitors taking a well-earned lunch break. Sitting on the tractor is Steven Warwick from Lachute, Bruce Kirby from Compton hiding behind the tractor, and Bill Dings from North Hatley.



The consumer program during the plowing match exhibited the agricultural products of Quebec. We see here that even the Young Farmers got in on the act by promoting the products of these regions.



day plowing
gentle chance to
techniques.

(Continued from Page 9)

Dr. NAYANA BARTHAKUR is taking a six-month sabbatical leave, ending January 5, 1979. Dr. Barthakur is an Associate Professor of Agricultural Physics and will study heat transfer in non-hardy plant species while on leave.

Dr. BERNARD BIBLE has left Macdonald to take up a position with the University of Pennsylvania.

Dr. ROGER BIDER has been appointed Chairman of the Department of Renewable Resources. Dr. Bider was Acting Chairman last year.

Dr. CLARK BLACKWOOD has returned from his sabbatical year at the University of Victoria in British Columbia. Dr. Blackwood, former Dean of the Faculty, will be teaching microbiology and biochemistry courses at Mac. He prepared for his return to his old duties by catching up with his research and teaching work while in B.C. and by taking time for other, less strenuous activities. These included a two-month break to visit Australia, with one half of the journey being made by boat.

Mr. DAVID BIRD has been appointed Auxiliary Professor in the Department of Renewable Resources. Mr. Bird, who is expecting to receive his Ph.D shortly, will be familiar to many readers as the Curator of the Raptor Research Centre on campus. He will continue to work with the birds of prey, supervising graduate work and setting up research programs, in addition to his other faculty duties.

Mr. STUART BOWMAN has been working as the Director of Farm Practice for the Diploma Program since April 1, and many Quebec farmers will be getting to know him. Mr. Bowman will supervise the Diploma students who are placed on farms for their summer work stages. He will have some teaching duties as well. Mr. Bowman comes from the Maritimes and received both his B.Sc. and M.Sc. from Mac.

Dr. ROGER BUCKLAND spent his year of sabbatical leave in Europe, studying poultry and French on the

side. He worked for six months at the Station de Recherche Avicole in Neuzy, France, on poultry reproduction, management, and nutrition. He then crossed the Channel to spend five months working on reproduction at the Poultry Research Centre in Edinburgh.

Mr. RUDI DALLENBACH is spending six months touring research facilities in Europe and the U.S. He's interested in the management of research farms and is studying low-energy agriculture, too. Not one to neglect his duties at Mac, Rudi writes faithfully from wherever he is at the moment. He summarizes his observations, and makes sure that we keep on the straight and narrow path back here.

Dr. IRVING DEVOE resigned from the Faculty on July 31. He moves on to become the Chairman of the Department of Microbiology and Immunology at McGill.

Professor JEAN DOUCET returns to Macdonald after having worked as a consultant in environmental sciences. He's been appointed Assistant Professor in Renewable Resources and will be teaching Wildlife and Fisheries courses.

Mr. LYNN FORGRAVE left Mac last winter to fulfill a life-long ambition. He bought a dairy farm in Ontario and is getting along very well, from all reports.

Dr. GHISLAIN GENDRON has extended his leave of absence to continue working on a Canadian International Development Agency project in Haiti.

Mr. MICHAEL HOFFMAN has been appointed Faculty Lecturer in the Department of Renewable Resources.

Dr. EDMUND IDZIAK will spend the next year in Holland on sabbatical leave. He'll be working on food microbiology there.

Dr. KEITH KEVAN has returned from a year's sabbatical to resume his teaching duties in the Entomology

Department. He is also the Director of the Lyman Entomological Museum and Research Laboratory.

Dr. BERNARD LAARVELD received his first degree from a Dutch university and then came to Canada. He received his M.Sc. and Ph.D. from the University of Saskatchewan. Dairy cattle have been his major interest from the start, and he will teach the Dairy Production course to degree students here. His research will concentrate on lactation.

Dr. A. F. MACKENZIE cut his year's sabbatical short by a few months to help out with the move to our new building but managed to get quite a lot done anyway. He says that he's turned back into a researcher and found out what his students were up to. He visited a number of research institutions in western Canada and the United States and covered a number of professional meetings. The best thing about being on sabbatical, Dr. MacKenzie says, is the ability to schedule one's own day.

Professor HELEN MACONOCHEE of the School of Food Science will be retiring this year. She is an Associate Professor of Food Science and has been at Macdonald for 29 years.

Dr. J. F. G. MILLETTE is taking leave of absence until the end of December. He will be working as a consultant in Guatemala, taking charge of the agricultural aspects of a development project in the Chixoy Valley there.

Professor HELEN NEILSON has returned from a one-year leave of absence in Australia. For more details on her stay there, please see the next article.

Professor DIANE RAYMOND will take six months' sabbatical leave starting the first of January. She is now working on plans on how to spend the time. Professor Raymond is an Associate Professor of Food Science.

Dr. KATRINE STEWART has joined the College as an Assistant Professor of Plant Science. She replaces Dr. Bernard Bible, mentioned previously.

Dr. ALAN TONG has resigned his position as Auxiliary Professor of Animal Science.

Dr. PATRICK WEATHERHEAD has joined the Faculty as an Auxiliary Professor in Renewable Resources. He will be working in the wildlife area, specifically with blackbirds. Dr. Weatherhead comes to us from Queen's University, where he has just earned his Ph.D.

Dr. SHIRLEY WEBER was appointed Director of the School of Food Science last June 1. This appointment was reported in an earlier issue of the Journal.

EDUCATION DOWN UNDER

It's not just the timing of the seasons that makes Australia different from Canada. Professor Helen Neilson of Macdonald's School of Food Science spent the last year working as a Department Head in the School of Applied Science at the Riverina College of Advanced Education in Wagga Wagga, New South Wales. She found the education system there to be quite different from what she was used to here.

Professor Neilson told me that Riverina was very much a community-orientated College. The department with which she was associated offers three programs: Physical Education, Consumer Services, and Social Services. There is a School of Agriculture on the Campus that offers agricultural programs in such things as Wine Sciences — grapes are an important crop of that part of the country — and it even operates a large Arabian stud farm. Social Services, the program in which Professor Neilson was working, covers a broader spectrum of responsibilities than the term implies to North Americans. In Australia, it includes just about anybody who works with people in the community, from health workers to parole officers, to teachers. In fact, said Pro-

fessor Neilson, summing up all the programs offered by Riverina College results in an academic effort that is remarkably like that devised by Sir William Macdonald when he set up Macdonald College in the early 1900s. Modern-day service to "Home, Farm, and School" is Riverina's *raison d'être*.

One of the more interesting aspects of Professor Neilson's stay was the opportunity to work with the off-campus study program offered by many Australian colleges, Riverina included. Australia is a very large country, and its people are scattered throughout its interior: the famed Aussie "outback", for instance. Australian colleges wanted to provide college-level education to people living in isolated regions, so they set up a system that seems to be an improvement of the correspondence courses given by some Canadian institutions. The example Professor Neilson gave concerned the Biology degree granted by Riverina. Australian students can study either right on the campus, or they can do most of the work at home. Students studying at home receive their course material in the mail; they come into the College only twice per year for intensive lab sessions of approximately five to seven days. Professor Neilson says that off-campus students receive the same quality of education as the residential student, but it takes twice as long to get a degree in any given program if one studies at home.

Professor Neilson found her year down under very satisfying. The work with off-campus students was especially rewarding. These people were of all ages and backgrounds; about the only thing they did have in common was a keen desire to learn.

Finally, some readers are probably wondering what "Wagga Wagga" means. It's an aborigine word meaning "many crows". Australian aborigines are very logical people, it seems. One "wagga" means one crow; two "waggas" means more than one crow. Presumably, a whole string of "waggas" means that you're trying to scare the darn things out of your corn field!

DEAN LLOYD TRAVELS

Dr. Lewis Lloyd has had a pretty busy first year as Dean of the Faculty of Agriculture, and his activities have not been confined to the campus. He recently participated in two functions which took him far from home.

Dean Lloyd is the Chairman of the Canadian Committee for the International Union of Nutritional Sciences. The International Union links scientists in the fields of foods and nutrition in some 48 countries, and it held its 11th International Congress in Rio de Janeiro last August. With Dr. Lloyd at the Congress were Dr. Florence Farmer of the School of Food Science and Mr. Henry Garino of the Animal Science Department.

Earlier that month, Dr. Lloyd had attended the Commonwealth Universities Congress. This, too, was held in a rather exotic locale: Vancouver, B.C. Some 221 universities from all parts of the British Commonwealth belong to this organization, which meets every five years. One of the topics of this Congress was "The World Food Problem and Universities"; this Dr. Lloyd's main interest there. Also attending the Congress was McGill Principal Dr. Robert Bell, with Vice-Principals Edward Stansbury and W. F. Hitschfeld. Senior officials of the other Commonwealth universities were on hand, as well.

So it's a well-travelled, if not well-rested, Dean who returned to Macdonald as the College geared up for another academic year. Dr. Lloyd said that the value in attending this type of function lies in opportunities they allow for the meeting of others who are involved in the same type of work — whether it be as scientist or university administrator.

The Family Farm



Published in the interests of the farmers of the province by the Quebec Department of Agriculture.



WINNERS OF THE 1978 AGRICULTURAL MERIT COMPETITION

The Quebec Minister of Agriculture, Jean Garon, has announced the names of the winners of the Quebec Agricultural Merit Competition. This year it was held in Region 4 with 63 participants from the following counties: Gatineau (11), Papineau (8), Joliette (7), Portneuf (7), Champlain (6), Saint-Maurice (5), Montcalm (5), Maskinongé (4), Laviotte (3), Berthier (3), Labelle (2), and Pontiac (2).

In the "Gold Medal" class, in which there were 12 competitors, Rodrigue and Réal Laferrière, dairy farmers of Saint-Barthélémy (Berthier County) placed first with a total of 906 points out of a possible 1,000. They thus won the gold medal, the title of Commander, the flag and the rosette of the Order, the diploma of "excep-

tionally distinguished merit" and a prize of \$1,000.

Of the 21 competitors for the Silver Medal, another dairy farmer, Normand Poirier, of Saint-Elizabeth (Joliette County), placed first with 903 points. Besides receiving the decoration of Officer and the diploma of "distinguished merit", he was awarded \$600.

In the beginners' class for the Bronze Medal, there were 30 competitors. George Pirie, dairy farmer of Bristol (Pontiac County) came first with 901 points. In addition to the decoration of Knight and the diploma of merit, he won a prize of \$250.

Three other competitors for the title of Commander obtained 900 points or more: Valmont Drolet, Saint-Raymond (Portneuf County), J.-Gérard Perrault, Sainte-Mélanie (Joliette County) and Omer Ménard, Thuro (Papineau County) who scored respectively 905, 903, and 901 points.

The 1978 Agricultural Merit competitors were honoured at a reception on Wednesday, August 30, at 2 o'clock at the Salon Duquesne at the Auberge des Gouverneurs located in Quebec City. The Commander and the top competitors in the silver and bronze medal classes were awarded their prizes and their decorations at the banquet which followed and which was presided over by the Minister of Agriculture.

WINNERS OF THE AGRICULTURAL MERIT GOLD MEDAL

by Jean-Baptiste Roy,
Agronomist

This year, the Gold Medal of the Commander of the Order of Agricultural Merit was won by Rodrigue Laferrière and his son, Réal, who, since 1963, have jointly operated the "Ferme Aurée" in York Range, at Saint-Barthélémy in Berthier County. A four-member jury awarded them a total of 906 points out of a possible 1,000, thus putting them in first place over 11 competitors. The Laferrières thereby brought their parish its first gold medal since the competition was started in 1890 and, to their county, its first since 1923.

Methodical and ambitious, this year's gold medalists have climbed

the three rungs of the competition. In 1963, they placed fifteenth in the bronze medal class and, in 1973, third in the silver medal class. In 15 years, the farm's original area of barely 50 hectares has been doubled and the dairy herd has increased at practically the same rate. However, over the years, the Ferme Aurée has done away with its herd of Yorkshire pigs, although it was one of the best in the province, to devote itself exclusively to milk production which, this year, will amount to 378,000 kilograms.

Encouraged by their success in the 1973 Agricultural Merit competition, the Laferrières redoubled their ef-

orts in an attempt to win the gold medal in 1978, the next time the competition was held in their region. In this, they were successful. Proof of their progress in the last five years is shown by the excellent performance of the herd in the Holstein Club of Joliette and by the good condition of their crops, some of which placed first in different contests. In 1974, Réal Laferrière won the provincial silage corn competition and, in 1976, the regional alfalfa growing competition.

The story of the Aurée Farm, which derives its name from one of the two branches of Laferrières who immigrated to this country, goes back

to 1946 when Rodrigue took over the enterprise from his own father, who is now 94. Eleven years earlier, he had completed a professional course in agriculture at the "Institut agricole d'Oka", an example subsequently followed by his only son, Réal, who took a course in agriculture at the École d'Agriculture de Sainte-Martine from 1956 to 1958. Rodrigue and Réal, who are respectively 61 and 37 years old, are now farming in partnership, the father managing the herd and the son the crops. According to the terms of their contract, they are salaried workers in an enterprise whose profits are reinvested for purposes of improvement.

The father and his married son live in separate apartments of the family home whose up-to-date conveniences are conducive to good housekeeping. Réal's wife, who comes from the village of Lanoraié and is a baker's daughter, has adapted well to farm life. She keeps the account books and looks after her son, Sylvain. At 14, this heir presumptive has already successfully participated in agricultural shows as a member of the Young Breeders' Club of Berthier.

Livestock

The dairy herd of the Ferme Aurée, comprising 112 Holsteins (60 milk cows and 52 heifers and calves), gives Sylvain the opportunity to work with and appreciate fine animals. Year in year out, the Laferrières have an average of about 50 cows milking. On December 31, 1977, the average 305-day yield of the 59 enrolled for ROP testing was 6,233 kg of milk and 243 kg of fat, with BCA's of 131 for milk and 138 for fat. Six cows had an average production of over 8,000 kg. At present, 56 cows are officially classified: 5 very good, 34 good plus and 17 good.



The joint operators of the "Ferme Aurée", Rodrigue Laferrière (right) and his son, Réal, prepare the crop program for the farm.

Improvement to the dairy cattle at Ferme Aurée is mostly made from within the herd, i.e., by raising the best of the heifers calved on the farm, but not excluding the occasional introduction of a few head bought from good breeders. The herd manager says that this slow but sure and economical method is responsible for the excellent health his dairy stock has always enjoyed, as the animals are thus seldom exposed to infection. Artificial insemination is done through the Saint-Hyacinthe Centre, whose specialists select, in cooperation with Rodrigue Laferrière, the best source of semen to use. The herd, which is in process of accreditation, resumed participation in agricultural exhibitions this summer and, at the Berthier regional fair, showed the grand champion junior Holstein and a dozen other excellent entries.

The fields and crops

Abundant crops are required to feed the herd adequately. These are

grown on the farm. Of its 106 ha, 83 are planted to crops and 12 are in pasture. A woodlot occupies 7 ha and 4 are uncultivated. The land under cultivation comprises 19 ha of clay soil, 56 of loam and eight of organic soil. In addition, there are 40 ha of rented land. The crops on all this land are as follows: 40 ha of fodder corn and grain-corn; 34 of oats; 30 of alfalfa hay; 10 of clover and timothy, and 17 are in pasture, of which eight are used as an exercise paddock where the cows are given the feed which cannot be fed to them in the barn.

All the crops are making good growth. Thus fodder corn (Coop. S-259) yields 60 tonnes per hectare, the grain-corn (Pride 103 and Coop. 120) 250 tonnes, and the Dorval oats 204 bushels per hectare. This summer, three cuttings were taken off the alfalfa field which was established without a nurse crop. These cuttings were made on June 1, July 1, and August 12.

The soil is enriched by judicious use of farm manure, preferably spread in the fall on the heavy soil of the corn land and hayfields. The program also includes the use of 80 to 90 tonnes of chemical fertilizers per year; the fertilizer formulas are based on the results of soil analysis. In addition, the land is limed (300 tonnes in the last five years). Good surface drainage and 20,000 feet of subdrainage add to the effectiveness of the fertilizer and lime.

The Aurée Farm produces all the forage, succulents and grain needed to feed the animals. Réal, the field manager, has attained the aim of self-sufficiency he set himself a few years ago. Outside purchases are now limited to 45 tonnes per year of minerals and protein supplements. The quantities to be incorporated in the concentrates to satisfy the herd's needs are determined by analysis of the forage.

Equipment and farm buildings

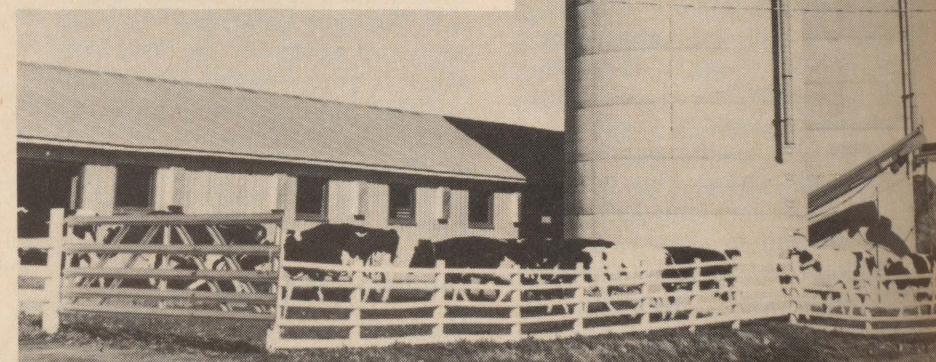
To cultivate such a farm properly with minimum labour, and to store the abundant crops and house the numerous animals, the Laferrières have no more than the essential equipment and various buildings. The equipment is valued at approximately \$46,300. The most recent acquisition was made this spring, namely the purchase and installation of a grain dryer with a capacity of 5,800 bushels of oats. Two 18 x 60 feet concrete silos and two 75 x 4 x 14 feet cribs are also available for storing the crops.

Ingenious and skillful, the Laferrières take very good care of their machinery. They have a large and easily heated workshop where the many tools are arranged ready for use. During the off-season, the machinery is protected against bad weather by a 144 x 40-foot hangar built in 1977.

The barn, which is a one-storey building, measuring 160 x 36 feet, has stabling for about 60 adult animals. The milk is piped from the barn to a bulk tank in the milk house. Adjoining the barn is a room for storing the feed grown and prepared on the farm. A conveyer brings the silage from the silos to a former piggery where, outside milking time, the animals feed during the summer. In winter, this building houses the young stock.

A macadamized driveway leads to the main buildings which have trees, grass, and flowers in front of them. The swimming pool is a popular spot during leisure time.

The sale of milk intended for human consumption constitutes the main source of income of the Ferme Aurée and, from time to time, sales of surplus grain and young stock increase the income of this very paying enterprise.



At milking time, the Holsteins gather at the barn over which tower two imposing concrete silos for storing the crops.

Rodrigue and Réal Laferrière have always graciously accepted all public duties which they have been asked to undertake. The family's social contribution is impressive both in the municipal and scholastic realm and in the field of agriculture and sports. The gold medal and title of Commander of Agricultural Merit with a diploma of exceptionally distinguished merit has been well and truly deserved by these progressive farmers, proud of their profession, who may serve as an example to farmers for many years to come.

This Month
with the

QWI

CANADA DAY

Pontiac County celebrated Canada Day in Shawville. Several high points of the day were: the opening ceremonies with His Excellency Jean-Pierre Côté, Lieutenant-Governor of Québec as speaker. Mr. Côté's home is in Bristol. There was an hour-long parade down the main street and Mr. Côté's speech in the hall and finally a great display of fireworks. With both provincial and federal dignitaries in attendance, it was a day of unity and an occasion to be proud to be Canadian.

The Pontiac County WI had a very interesting float, beautifully decorated in blue and gold colours, drawn by a tractor driven by Mrs. Clarence Knox, County Citizenship Convener and President of Clarendon WI. The float depicted early times with its antique furniture and ladies in old-time dress. The 65th anniversary cake was made and decorated by Mrs. Earl Findlay who has held many offices in the WI.

Riding on the float were: Mrs. Ina Kilgour, Provincial President, Mrs. Violet Poole, County President, Mrs. R. Rabb, County Past President, Mrs. Evelyn Duff, County Secretary, Mrs. R. Browse, County Vice-President, Mrs. H. Elliott, County Treasurer, Mrs. Helen Routcliffe, Mrs. L. Fitzsimmons, and Mrs. Carmen Bretzlaff. The ladies had lunch on the float before the parade began. Some were quilting, churning, knitting, and rocking the baby in a 100-year old cradle.

The spirit of unity prevailed throughout the day and night.

An Informative Outing

On August 9 **Missisquoi** County WI members motored to Dixville to tour the Dixville Home — a training cen-



Last August, for the first time the Fordyce WI held their picnic at their own site. The members are gathered around the cairn and plaque. Some of the husbands joined the members for supper and two new members attended.



tre for mentally handicapped children and adults. The residents are taught responsibility and how to care for their own personal needs. Every possible craft is taught and upon touring the Craft Hall, a most magnificent display was viewed.

Many of the residents are housed in small cottages and each has his/her own duties and is responsible for his/her own clothing, bed, etc. This past year for the first time several more advanced residents attended the Alexander Galt Regional School in Sherbrooke, where they were enrolled in an occupational course. This proved to be most successful. The pupils were picked up and returned by bus.

Following a most interesting tour, a bountiful and delicious salad lunch was served to the WI by the Dixville Home Cafeteria staff.

Honey Graham Crackers

Mix:

2 cups whole wheat flour
2 teaspoons baking powder
1/4 teaspoon salt
3 tablespoons brown sugar

Cut 1/2 cup butter or margarine into the flour mixture until it is fine.

Mix 2 tablespoons honey with 2 tablespoons milk, then add to flour mixture. Mix until dough sticks together and does not stick to bowl or hands. Knead a dozen times.

Roll out between waxed paper, a 1/4 at a time. Put on an ungreased cookie sheet, cut and make holes with a fork.

Bake at 375°F. until lightly browned. When edges start to brown, remove these crackers and continue to bake the rest.

(Provincial Home Economics Convenor Mrs. Ruby Knights sent in this recipe which she received from Chateauguay Huntingdon County with the comment, "These are absolutely delicious. You'll never want to eat commercial graham crackers again.")

Rhubarb Coffee Cake

2 cups sifted flour
1-1/4 cups sugar
1 teaspoon soda
1 teaspoon salt
1 teaspoon cinnamon
1/4 teaspoon allspice
1/4 teaspoon cloves
1/2 cup salad oil
2 eggs
1/2 cup milk
2 cups fresh rhubarb, cut very small

Sift dry ingredients into mixing bowl. Combine oil, eggs, milk in another bowl and beat well. Add to dry ingredients.

Fold in cut rhubarb and turn into a greased 9 by 13-inch pan. Spoon the following topping over batter and bake in preheated oven 350°F. for 50 minutes.

Topping

2/3 cup flour
1/2 cup brown sugar
4 tablespoons margarine
3/4 cup flaked coconut
1/4 cup chopped nuts.

Blend all together and put over batter.

(The above recipe was sent in by Mrs. Esther Mason of **Fordyce** branch.)

How We Celebrated Canada Night

It was unanimously agreed that we (**Valcartier WI**) do something again this year to celebrate Canada's 111th birthday. We worked with the local council in arranging this event. The members of the council decided to bring in the Clansmen from Smith's Falls, Ontario. This group of 29 included musicians, singers, and dancers. They are rather familiar to our region, having been here on previous occasions.

Our June meeting was a hectic one. In addition to the usual business we had to arrange billets for 14 members of the musical group and also make plans for serving lunch at the end of the evening.

The Clansmen came in early July First. They treated us to a little music and singing, then took off to a councillor's home where a turkey dinner was in the process of being served.

At 7:30 p.m. the Institute ladies gathered at the Community Centre to make the lunch. Eighteen loaves of sandwiches and 240 open buns were filled with turkey, ham, and egg filling. Of course all foods had to be purchased and prepared in advance. Each member brought in a large pan of sweets also.

The celebrations began at 8:30. There was a concert of Scottish, Irish and country music, bagpipes included. There were dancers and singers as well. This performance lasted one hour and was thoroughly enjoyed by all.

Then dancing began — our organization sponsored the dance. The Clansmen supplied the music and everyone was tapping toes or clapping hands. It seemed to be impossible to sit still when the music struck up.

Lunch was serve-yourself style and coffee was served by our ladies.

The climax to the evening was a lusty chorus of voices — approximately 250 — belting out our National Anthem. Even with this signal many people were reluctant to leave the premises. The atmosphere during the evening was terrific.

We feel good about the whole thing. We also made some money, but did not consider that an important feature.

Dear WI Members,

October's hazy, golden days are here! The embellishment of the burnished hillsides is spellbinding, for our Quebec landscape lends itself so well to this beauty. Each of us has his or her own favourite haunt at this time, perhaps down a lane or through a maple woods, but it is certain there will be leaves tumbling down. But tonight a big, round August moon peers down from behind a tall fir tree and casts silver



Ascot WI Life Members pictured at their 60th Anniversary, front row, left to right: Mrs. W. Pearson, Mrs. W. Richardson, and Mrs. S. Coates. Second row: Mrs. A. Hatcher, Mrs. F. Ingham, Mrs. D. McElrae, Mrs. W. Mitchell, Mrs. H. Robertson, and Mrs. L. Butler.

lines on this table where your reports are scattered. Among them is an interesting report received from Kathleen Rebel of Gaspe County. The roll call for **Doulastown** was name a city or a town starting with your initial. An item was read on compost and another on the nutritional value of pork. **Gaspe** welcomed a new member, handbags were brought in with two members sharing the cost of one. The roll call at **Wakeham** was to tell what food had been produced for their own table in the past year. Several members grew enough vegetables for the winter. A parcel was sold, money given to Pennies for Friendship, and \$10 to the Gaspe Elementary School. Slides were shown on parts of Quebec, Ontario, and British Columbia. Wakeham and Doulastown also have prepared handbags. Then from **Murdochville** the roll call was "come as you are." This branch must be very busy for they have helped many groups: \$30 to Diabetic Society, \$20 to Cancer Society, \$20 to Murdochville Sea Cadets, \$25 to Murdochville High School for the year book, \$20 to the High School graduation, \$50 to a family in need, and \$20 for sweaters for Brownie leaders. The ladies from this branch sew for the hospital, making house coats, slippers and

pyjamas. The Knights of Columbus furnish some of the material, the WI members the balance. This branch have a card party every Saturday evening during the winter. An interesting report was given by the delegate who attended the Convention at Macdonald. Also they have a travelling food basket; the ladies enjoy it, so they are going to continue with it. I would like to hear more about this.

At **Bury** Mrs. Ruth Atto, R.N., gave an informative talk on Home Care Services in the area. Pictures taken at Compton County's 65th Anniversary were shown. At **Canterbury** a community family project was discussed and some plans were made for a cookout. Mrs. Muriel Watson, School Nurse, showed a movie on nutrition. Mrs. Francis Bain, Citizenship Convener of **East Clifton**, in a program on Dominion Day celebrations, noted that people from California to Michigan are asking "what is it like to live in Quebec?" Compton County had their booth as usual at the Cookshire Fair. This year it depicted the Associated County Women of the World, representing 80 countries and over eight million women. They also sponsored a fish pond and helped with the sports on Children's Day.

The Publicity Convener for Stanstead County writes: "summer months are a period of relaxation from WI work and a time to play a little." **Ayer's Cliff** enjoyed a dinner together, then a visit to "Mystery House" in North Hatley. The **Beebe** branch motored to Orleans in Vermont and were given a tour of the Ethan Allan Furniture Factory.

Stanstead North enjoyed a family gathering and dinner. Ayer's Cliff attended a meeting of the Municipal Council to present a proposal to preserve the community's first cemetery with a suitable monument and markers placed to perpetuate the memory of this pioneer site. Plans were made to inspect students' school fair gardens and of course County members participated in Ayer's Cliff Fair where the tea room was in operation for the duration of the Fair and there was County participation in the Crafts exhibit in competition with Les Cercles des Fermières, and a sales table was again a feature in the Main Hall. All branches sent cash donations to the School Fair treasury. Another branch making plans for the annual School Fair was **Inverness** in Megantic County. The same branch was preparing for a garage sale in September.

The Welfare and Health Convener at **Granby West** was concerned about the disposal of old refrigerators and wished the WI could exert influence to make stricter laws in this matter. Two members chose a day to do good deeds and started out visiting shut-ins, also notifying a farmer that his cows were in the millet. Then they suggested that each member take a day a month and spend it doing good deeds. At **Waterloo Warden** a letter was read from Can-Save acknowledging the receipt of numerous knitted articles taken recently to the Montreal office. A pretty handmade cushion was brought in to go with the afghan and crocheted centrepiece for the October fund-raising project. From **Granby Hill** we read that eight ladies had attended a dinner and meeting as guests of the Abercorn WI and expressed their pleasure at

being invited. Under Citizenship an interesting item was read about a 19-year old blind boy in Grade X in KLO Secondary School in Kelowna, B.C. Bobby Shanks, the convener's son, teaches geography there and helped to train this blind boy for the British Columbia games for the disabled. He entered seven events and won five gold and one silver medal. He entered the 100 metre free style swim, shot put, standing long jump, 60 metres, 400 metres, and 800 metres. The B.C. Games for the Disabled are a qualifying meet for the Canadian Games.

The July meeting of **Frontier** was combined with the annual picnic and held at Carillon Park. The roll call was bring a child, and 21 members and 27 guests were present. Games were enjoyed by the adults while the children took part in races for which they received prizes. Sandra Bates, who was in charge of the afternoon entertainment, deserves thanks. This same branch reported a contribution to a family from Greece's Point who had lost all their belongings in a recent fire. Members were reminded to bring in handibags. This group also served tea at St. Mungo's in Cushing to a busload of 46 members and guests of South Mountain WI. Plans were made at **Arundel** for an up-coming bazaar. There being three new members, the tables will be well managed. The Home Economics Convener at **Upper Lachute East End** reported on the excellent exhibits that were in the WI booth at the Fair. Four members from **Jerusalem-Bethany** visited Manoir St. Philippe and distributed cups of ice cream to the residents. On a warm day this proved to be a welcome treat. After the business part of the **Dalesville-Louise** meeting held at the summer home of one of the members on Lake Louisa, a presentation was made to Mrs. G. Overing who is leaving to take up residence in the Toronto area. The roll call for the **Brownsburg** meeting was bring a quilt top or a pattern for display. This proved interesting as quilts were shown and discussed. One was a 42-year-old quilt which had signatures of residents of the area embroidered on it. The special feature of the meeting was a talk on quilting by Mrs. Nellie Dewar of

Frontier who one must admit is an expert quilter. She displayed a centennial quilt designed and made by herself. It was on a white background with red maple leaves and lettering.

Lennoxville members served a noon luncheon at the local Town Hall for the Council and their guest, the Hon. Marcel Leger, Minister of the Environment. This visit was in connection with the Massawippi River clean-up. There were 19 handibags donated to CanSave and \$40 to help the School Fair. Mrs. S. Parker reported on the FWIC 16th Annual Board Meeting. Members saw an excellent showing of Hoodless Roses at the Town Hall given by the WI. A suggestion was made that children's books be kept and passed on to future generations. Members were asked to take pictures of and make notes on local old bridges. A salad supper was served to patients of the Bennett Nursing Home by members. The Citizenship Convener of **Belvidere** Branch reported the making and filling of 10 Handibags and the Welfare and Health Convener reported that used stamps, bread tags, and Dominion Store slips were turned in. Money was voted to the Scholarship and Bursary Funds at Alexander Galt Regional School, the Landrover for Lesetho, and to the Sherbrooke County Ploughman's Association. Bingo was played after the meeting.

Aylmer members enjoyed an outdoor luncheon meeting at the home of Mrs. Roy Leach. For their next meeting it's "bring a friend, bring your lunch, bring an article, and buy one."

Mrs. Sutherland from Richmond County wrote that **Melbourne Ridge** and **Spooner Pond** sponsored picnics for children with games, races and delicious refreshments. Prizes were presented by Denison's Mills members at St. Francis Elementary School and ADS Elementary School. **Richmond Young Women** gave gifts to three people following surgery. At **Cleveland** the Agriculture Convener gave instructions on how to care for tuberous begonias. A contest on the best begonias was held — these plants being grown from tubers the

members had planted in early spring: 1st prize, Gloria Pease, 2nd, Doris Taylor. Members from **Richmond Hill** visited the Brown Shoe Factory in Richmond. A braided rug, a county project, is now completed.

The President of the **Ormstown** branch entertained the members at a picnic luncheon at her home on Lake St. Francis. The roll call was answered by members giving the name of something worth while which does not cost anything: a smile, a helping hand, a cheerful greeting, a visit to a shut-in. Plans were made to celebrate the 45th Anniversary on August 31 by having a hot meal at Heritage House and a visit after to the Federal Information Centre at Allan's Corners. **Franklin Centre** was invited to a joint meeting with **Huntingdon, Dundee, and Dewittville**. **Hemmingford** sponsored a booth at the Apple Festival and all branches supported the local fairs.

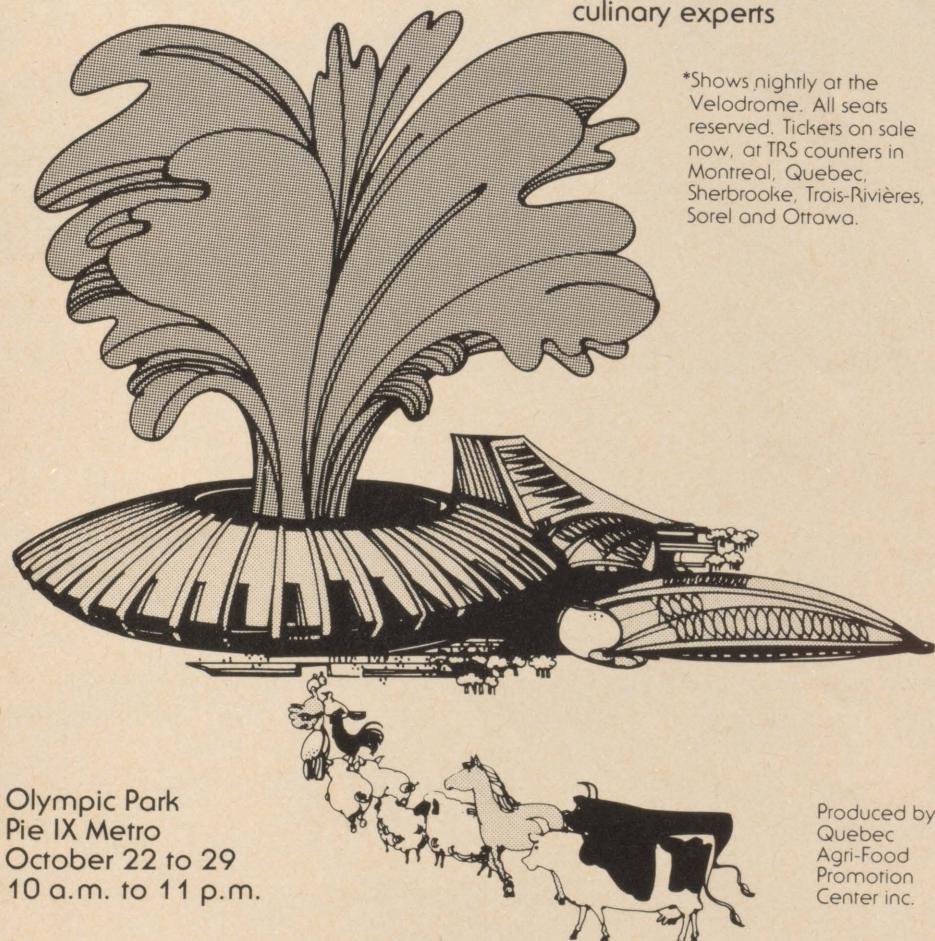
Mrs. Bill Powell, who is a niece of the late Miss Abbie Pritchard, was a guest at the **Wyman** meeting and presented, on behalf of the WI, mohair throws to Mrs. S. McNeil and Mrs. Melvin Stewart. Mrs. Powell was delighted to have this honour and said she was sure that her aunt would be pleased if she knew her money was being used in such a useful manner. Members signed a birthday card to be sent to Mrs. M. Bronson of the **Quyon** branch who celebrated her 92nd birthday.

Clarendon's guest speaker was Mrs. Graham, a French teacher at the Dr. S. E. McDowell School. She gave a very interesting and informative talk on teaching French, total immersion, partial immersion, and extended program.

Some thought-provoking mottoes were sent in: **Frontier**, The best doctors are Dr. Diet, Dr. Quiet, and Dr. Merry; **Dunham**, The heritage of the past is the seed that brings forth the harvest of the future. Then this one from **Murdochville**: Each lovely thing must have its start as a dream and a prayer in some man's heart. This last line keeps recurring to me at times since I read it.

Gladys C. Nugent,
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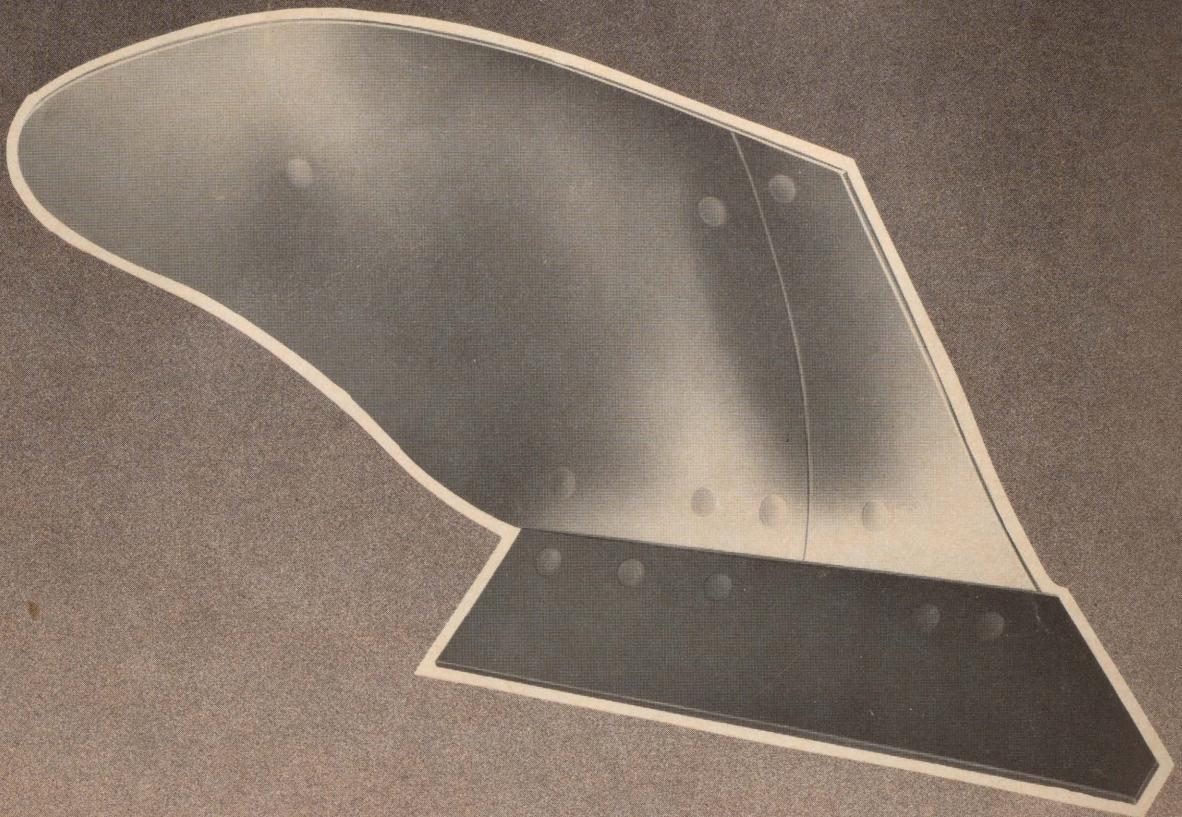
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